

Newsletter

North American Rock Garden Society Berkshire Chapter October 2008

Next Meeting

Saturday, November 1 at 11:00 AM

Berkshire Botanical Garden Exhibit Hall BBG is located 2 miles west of Stockbridge MA at the junction of Routes 102 & 183

<u>Annual Potluck Luncheon</u> <u>Meeting</u>

Small Irises – Many Choices

Jan Sacks and Marty Schafer will present a program that will include many different kinds of small irises for rock gardeners, including shade lovers and sun lovers, clumpers and spreaders, hybrids and species, cultivars and seed grown plants. They live and garden in Carlisle, MA, so they are quite experienced with our weather, and our rather variable growing conditions.

This is a <u>Potluck</u> lunch, and we need all members to bring something to contribute to the meal. If you have any questions, please email me at: <u>petergeorge@verizon.net</u> Or call me at 978-724-0299

RSVP by October 28 to Pam Johnson 413-528-4611 pamjohnson@hughes.net



From The Chairman:

Introduction of non-native plants and animals into a local ecosystem may result in alteration of the species mix by harming or displacing native species. These introductions may be intentional as the house sparrow, the gypsy moth, purple loosestrife, oriental bittersweet, Russian olive, etc. Other introductions have been unintentional such the as common earthworm (Lumbricus terrestris), various parasites and insect pests (e.g., the Japanese beetle, the American cockroach - both of Asian origin). To this latter group we, in Massachusetts, New York ad Illinois, may add Anoplophora glabripennis, the Asian longhorned beetle.

Arthropoda, a major group (phylum) of animals characterized by having a skeleton covering the outside of the body, includes the subgroup, Class Insecta. Currently there are between 1 and 2 million described insect species with an estimated 3 to 5 million yet to be discovered and named. Within the Insecta, beetles (Order Coleoptera) represent the largest single group with about 500,000 species (40+% of all known insects), 98% of which are terrestrial (vs. aquatic). The earliest insect fossils date back to the Carboniferous Period (360 - 300,000,000 years ago) (e.g., cockroaches) with the earliest beetle fossil from the late Permian Period (260 -250,000,000 years ago). The above-mentioned Asian Longhorned beetle belongs to the family of wood boring beetles, the Cerambycidae (20,000 species). The term 'longhorned' refers to their very long antennae.

The Asian longhorned beetle was first found in NYC (Brooklyn) in August 1996. It is believed to have arrived in the USA in wooden pallets from China. It was later found in the suburbs of Chicago and most recently, in Worcester, Massachusetts (August 2008). However, based on a collected specimen by an insect exterminator, it estimated that the beetle has been in Worcester since 2003. The adult female chews a small break in the bark of a tree and lays a single egg in each hole. Upon hatching, the larva tunnels under the bark to feed. It over winters by tunneling deep into the tree. Excavation is facilitated by heavily sclerotized mouthparts, the mandibles, which are tough enough to chew through sheets of lead, silver, copper or zinc. Sclerotin is formed by cross linkage of chitin with benzene ring structures. Wood is 40-60% cellulose by dry weight and cerambycid larvae have a gut enzyme to breakdown the cellulose into the sugar glucose (= dextrose).

The current approach by the USDA is to attempt eradication of the beetle population by cutting the infected trees and chipping them, including their stumps, into one-inch pieces. Positive trees are cut down within one day of detection. This is done, however, only after the first heavy frost, which kills the adult beetles. If done before frost, adult beetles could simply move to infect another tree. Tree removal is without charge to the property owner and cut trees are replaced with resistant species. Susceptible trees within a 1.5 mile radius of a positive tree will be treated, by injection, with the insecticide imidaclopid as a prophylaxis. This 3 mile diameter zone is considered a "USDA Regulated Area" and no fire wood may be taken out of the area and insecticide treated maples cannot be tapped fro syrup production.

As of 30 September 2008, 10,000 trees in Worcester have been surveyed and 1265 trees have been found infested in the Regulated Area. Ground surveys are done with bucket trucks. Although the beetles have been found only within Worcester, the Regulated Area (62 square miles) is near forested areas and so includes portions of the neighboring towns of Boylston, West Shrewsbury Boylston, and Holden. Considering the extent of forestation in Massachusetts, it is a scary thought that this bug may get (or is) out of control. Let's hope that the USDA and the Massachusetts Dept. of Agricultural Resources are successful in their attempt to eradicate the potentially serious pest (killer) of hardwood trees. If you would like to keep up with the latest information on the pest in the Worcester Regulated Area go to the web site: www.umassgreeninfo.org. As a note, it is now illegal to use wood in construction of shipping containers for entry into the USA.

Please try to arrive at least 45 minutes early for the November meeting, to allow us to get everyone's food placed properly prior to the start of the meeting! Thanks, PFG



Campanula formanekiana Degen & Dörfler

Text and Photo By Zdenek Zvolanek

There is а Macedonian bellflower in the Balkan Peninsula which has verv decorative silver-grey leaf rosettes for one or two years. One blooming great manifestation occurs the following year, ending with а gracious death after setting many seeds. It monocarpic is а species named in honour of the Moravian professor Formanek Eduard (1845-1900) author of Flora des Balkans.

I first saw its white variety during a

lecture given by the late Lionel Bacon. After reading the AGS Bulletin about the Macedonian Expedition, I was prepared to try it in our dry and hot continental rock garden in the Czech Republic. I visited Mt. Vermion in NE Greece with my only team member, driver, cook and plant spotter Joyce Carruthers on the way to Eastern Turkey about 6 years ago. After refreshing ourselves with a bottle of local red wine we set off to look for Lilium martagon of the same colour (which flowers in the spring) in a deciduous forest behind a tall and isolated limestone outcrop. The hot, dry rock was about 1600 meters above sea level and there we discovered the dried up campanula with some seed. Two years after planting some seedlings we were rewarded by the astonishly beautiful pyramidal inflorescences covered with large pale blue blossoms. The plants ranges between 20 – 40cm; some flowers were paler and some

darker but none had white bells. In its natural habitat this species prefers an eastern exposure so our plants were placed in with crevices some shelter against scorching sun. Our first seed crop distributed was to strategically important places in the rock garden and plenty of pretty rosettes appeared over the following years. We have enjoyed great displays of pale blue colour above our mildly alkaline igneous rock outcrops and have distributed the seed of this relatively unknown campanula to friends. I just cast the seed around where I would like to see these lovely plants. It is

important to note that the seeds germinate uncovered, needing the light.

<u>A South Africa Botanical</u> <u>Pastiche</u>

Reprinted with permission of PK from the Alpine L List serve

I have been back from South Africa for nearly five days, and have almost recovered from jet lag and finally posted the last of my blogs

http://www.botanicgardensblog.com/index.p hp/2008/10/16/all-good-things-must-

end/#more-723 on the trip: if you haven't



checked into them, this is the one you would probably most enjoy because it has a wonderful picture of *Aptosimum indivisum*, surely one of the most gorgeous rock garden plants in the world. Notice also the dense cushion of *Aptosimum spinescens*, an incredible cushion plant. I collected seed of this plant near Fraserburg (and *indivisum* at Sutherland) in 1994 and donated lots to the NARGS exchange: I wonder if anyone had luck with these? We, alas, didn't keep them for very long.

Judging from their distribution in the coldest parts of the Hantam and Nama karroos, they

should have cold tolerance, although they are obviously from a semi-arid environment and have the typical challenges that entails. We saw another three or four species of

Aptosimum on this trip--one prettier than the next. This has to be one of the loveliest groups of South African rock garden plants. Most of the participants on the trip took several thousand pictures altogether (one took 4000!), as have I: I haven't even Aptos downloaded the last slug of them, which

on

one



Anemone tenuifolia

miniature, nearly succulent Dimorphotheca, also in pink, and no end of gorgeous miniature succulents in several families, as well as mystery Selago, Stoebe, Restios and who knows what else. I suspect the West Cape mountains harbor hundreds of dazzling alpines. Virtually all the hardy Africans we have are from the Southern Drakensberg, which I don't think we've even begun to tap, and the Northern Drakensberg is pretty virgin territory for North Temperate horticulture. I aver the interior Karoo and the Eastern Cape mountains may have the most diversity of all for North Temperate gardens: taken together I suspect these five cold temperate regions of South Africa may have as much floral diversity as any place on earth for rock gardeners.

> I found and purchased a book in Johannesburg titled <u>Lexicon of</u> <u>Rock Gardens: A Guide For</u> <u>Successful Construction and</u> <u>Planting by Herman Hackstein and</u> Wota Wehmeyer.

> I sincerely hope Herman and Wota are not readers of this newsletter, because I am about to pan their book. On the POSITIVE side, it is perfectly put together, very

handsome to look at and the format is ideal; A real stunner in every aspect except for content. At least half the content is totally inappropriate to rock gardens (a random sampling turns up Cotinus coccygria, Salvia nemerosa, Robinia hispida, Cymbalaria alopecurioides, muralis. Pennisetum Ageratum houstonianum, and vulgar double forms of Bellis perennis. There is a stunning image of Sempervivum ciliosum on page 265 (not even labeled), and the image shown for Phlox subulata is actually Erinus alpinus, and to my chagrin and eternal picture shown shame the for "Mesembryanthemum" is Gazania sinuata.

Surely we can do better than this. There is apparently a market for rock garden books. When will I open one up that is not a rehash



Aptosimum indivisum

of

of

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beautiful

unknown

Cushion

Anemone

include many I took

top

of the

places I have ever

been, and a veritable

tenuifolia in melting

pink, a fascinating,

Matroosberg,

stunningly

smorgasbord

gorgeous,

alpines.

proteas,

of all that have come before, and yet sparkles with the wit and wisdom of Clarence Elliott's Rock gardening, or Roy Elliott's Alpine Gardening--classics that fanned my love of our art so many years ago? There have been some wonderful books published since then, of course, but I think we need some more really meaty, thoughtful books capturing the state of the art as it is that are not stuffed with full blown conifers, Japanese maples, coarse perennials, annuals and tired prose.

Sermon ended,

Panayoti Kelaidis

Geoffrey Charlesworth: <u>A Celebration of His Life</u>

Robin Magowan



How do you celebrate a life as multi-faceted as Geoffrey Charlesworth's? By accenting the rare quality, Geoffrey's executor, Pamela Johnson decided, that Geoffrey brought to every aspect of his long activity-rich life. Most of us knew Geoffrey in his comparatively late aspect as plantsman and garden writer, and as half of the dazzling fifty-year partnership he shared with Norman Singer. We were less prepared for a man of Renaissance-like attainments: pianist-composer, code-breaker, poet, painter, dancer, professional mathematician and university dean.

Geoffrey and Norman met at top-secret Bletchley during the war while folk dancing. With two pianos and a harpsichord in their 78th Street New York home, music had to have something to do with what they shared. But it was a diverse array of music Pam assembled: English tunes presented by Geoffrey's niece Jane and her husband, Steve Smith; three Celtic jigs played from memory on the violin by an intrepid Cliff Desch; the early Beethoven D major quartet interpreted with breath-taking sensitivity by the superlative Berkshire-based Rosamund Trio plus 1. Along with Pam's sketching out of Geoffrey's early life, talking about their shared Yorkshire background and reading from Geoffrey's memoir about how he met Norman, it set a high standard for the rest of us.

The speakers, the well-presented food and delicious wines, lived up to that high standard as we sat back and heard about Geoffrey's yellow-painted Kimball Farms apartment--with its one blue wall. From his nephew and fellow plantsman, David Briggs, we learned about Geoffrey's more British self. Joanne Cossa and Elizabeth Zander filled in other gaps with two wellpresented talks. A picture emerged of a Geoffrey as admirable as he was brilliant. It all made for a pretty rare occasion.



Connecticut Foray

Photo of Edgeworthia papyrifera and text by Lee Curtis, with permission of the Editor of Saximontana, the newsletter of the Colorado Chapter of NARGS

The North American Rock Garden Society has a special, first time only, scholarship for

members who have never attended a study weekend or conference outside their own geographical region. Thanks to this stipend, I was able to attend a study weekend presented by the Berkshire Chapter in Farmington, Connecticut last March. The sold out weekend included



two days of speakers from all over the world, plant sales with fourteen vendors, rock garden tours, and a special, garden tour of the New York Botanic Rock Garden. There were raffles, book sales, author signings, great food, and over two hundred avid rock gardeners holed up inside a hotel ballroom, sharing photos of their beloved gardens and pet plants. We rock gardeners formed a self-help group for the winterimpaired.

Connecticut has different climate, lots more moisture and a thriving deciduous forest atop soil that erupts with new stones every spring. (All the gardens we visited had their own personal outcroppings, all you have to do is dig around a bit and rocks appear.) Connecticut has more miles of beautiful stonewalls than roads.

This winter weekend had lots of inspirational speakers talking about rock garden survival without snow cover. With different accents, and different ideas about how to garden, they each contributed different solutions, and different plant lists. I had enjoyed Geoffrey B. Charlesworth's writing for many years for the Quarterly and his two books *A Gardener Obsessed* and *The Opinionated Gardener*. I was honored to have heard probably his last public lecture. His talk meandered through past years, reminiscing about fellow gardeners and gardens he had known. Zdenek

Zvolánek, from the Czech Republic, spoke about Fortified Rock Gardens. He loved many plants from our American southwest.

The Berkshire chapter was also able to coax Alan Bradshaw of Alplains from eastern Colorado to speak and he brought bulging

suitcases of seeds to sell. The entertaining John Good from Wales spoke on climate impact on alpine plants. He has an excellent new book with David Millward, <u>Alpine</u> <u>Plants: Ecology for Gardeners</u> that is worth a serious read.

I went prepared to meet new vendors with exotic plants, some which will make it in Colorado with a little extra attention. A sampling of plants I brought home were *Origanum amanum* (in bloom this August), *Daphne* x 'Lawrence Crocker' and *Arisaema sikokianum* (which immediately bloomed when I returned home!).

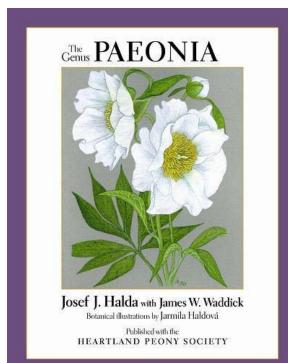
Three garden tours arranged after the Conference were also inspiring. Marcia, Randy (Tatroes) and I visited each distinctly different garden, yet all are appropriate to the climate and terrain. We visited the New York Botanical Garden the next day and strolled the fifty acres of open parkland.

I had five wonderful days of intensive rock garden study. Seeing how others garden gave me a little perspective on the piece of soil I tend. If you're interested in the stipend offered by NARGS, talk with Dick Bartlett, Randy Tatroe, or other previous recipients, Caryl Shields and Elly Amade.

The stipend comes with a stipulation that the recipient must contribute to the Chapter by writing or drawing for the Saximontana, or presenting at a meeting if invited. —Sally Boyson, Ed.

Harvey Wrightman:

Concerning Josef Halda's Spring Programs



I want to tell you what I intend to have Halda do when he is here. Josef has a wonderful sense of design. One of his lectures is to be on "Container Gardens, Czech Style". We will organize a session here at the nursery for "trough planting" with Halda providing instruction, along with Irene and of course all materials are at hand here. I'm also going to pitch this one to the Toronto Botanical Garden for its members. The whole thing is portable and I'm sure it would be a hit. Halda is good in a demonstration group session if someone conveniently asks the right questions.

I know your Chapter is interested in propagation techniques, and that also would be a good topic for Josef. If you can provide the materials for cuttings and grafting, he can certainly show the specifics. This could be in addition to a standard slide lecture. Again, you must devise the format and provide the strategic questioning. English is a second language, but he understands it well and can give good responses. If you press him for answers, he will respond.

Plants From Seeds: Germination, Alplains Style



Why start plants from seed? Aside from the enormous satisfaction of seeing young plants develop to maturity, many more plants can be grown from seed than from practically any other method such as taking cuttings or splitting bulbs, etc. The possible exception is tissue culture but this technique is beyond the typical hobbyist. Often, seed is the only way to obtain valuable plants. Besides, seed-grown plants are genetically different individuals and thus can set more seed, unlike clonally propagated plants. Germination failure often lies in the grower not knowing the exact requirements for a particular species and most seed lists don't give a clue how to sprout their seeds. Here at ALPLAINS, we constantly run germination tests on the seed we offer and distill that knowledge into codes that accompany every seed packet. Many other people and agencies also run germination tests and publish their results in various books, pamphlets and websites, etc. which you are invited to study. Some of these are highly technical and may discourage the novice from getting started. If you are reluctant to grow plants from seed, feeling it seems too complicated or involved, then the goal of this article is to simplify seed-sprouting enough to give you the confidence to succeed.

Using only two basic techniques, called stratification and scarification, and various combinations thereof, you can sprout over 95% of the seeds listed in the ALPLAINS catalog. These techniques apply just as well for Asian, European and other seeds found on seed lists from the U.K., Czech Republic and Japan. There are plenty of challenging cases, to be sure, but just a little knowledge will allow you to sprout most kinds of seed and greatly increase the variety of plants growing in your garden.

Sowing the Seed

Before discussing the techniques, you need to select a way to sow the seeds. Most hobbyists and commercial nurserymen have their favorite sowing medium/potting system. What's important is to sow seed indoors in a sterile medium in a protected area — sowing outdoors directly into the garden invites disappointment due to damage from insects, rot and frost. It's true seeds sprout in their native habitat just fine but nature produces seed in vast numbers in the hopes that a few seedlings will survive to adulthood. We are more interested in obtaining the highest germination rate from our little seed packet. I use what was called Metromix 350, but it is now sold under the name Fafard and consists of sphagnum peat,

vermiculite and a wetting agent. This sterile material will absorb moisture even when bone dry. I mix about 4 parts of the medium with 1 part fine perlite. I used to sow in obsolete 7-1/2" X 5-1/2" Styrofoam flats but now I use 4" square, plastic pots, fifteen of which press-fit into matching trays. I also use only pencil (0.7 mm) to mark the labels — the ink in those "permanent" markers fades after a year.

Do you sow the seed on top or bury it? Many seeds do require light to germinate, most others don't care but very few actually require darkness. So I always sow on the surface except for large seed, e.g. *Ipomoea*, *Paeonia*, *Sophora*, *Amsonia*, etc. Flat seed like *Asclepias*, *Yucca* and *Agave* are best inserted edge-wise into the mix. Some growers apply a thin layer of very fine granite sand on top to discourage algae growth and stabilize small seedlings — I don't bother. You can always add more mix to stabilize spindly seedlings if necessary. I keep the trays or flats in 4-foot by 4-foot



wooden boxes ("warm box") that have plastic rollcovers to keep moisture in. Heating cables provide bottom heat that suffuses through an inchthick layer of silica sand (30 sieve.) Over each box is suspended

a bank of five standard 4-foot fluorescent shop-lights. Everybody develops their own system but it's important to be able to control the temperature and light. Of course, if you sow seed in your greenhouse, this equipment is unnecessary and you need only figure out a way to water the flats with a mist system.

Basic seed germination falls into three categories:

<u>No Pre-Treatment:</u> <u>The Absence Of The Requirement For</u> <u>Either Basic Technique</u>

All seeds must absorb moisture before germination can succeed. Once accomplished, seed sprouts in a relatively short period of time (days or weeks) at room temperature. Seeds in this category have neither a hard seed coat nor a requirement for cold temperatures.

Technique 1: Stratification

After absorbing moisture, seeds in this category require one or more shifts in temperature for certain lengths of time. Dry seed cannot be stratified! After sowing the seeds, I let the flats sit in the warm box for two or three days to allow them to imbibe moisture. Then I wrap the flats in plastic and place in a refrigerator I use solely for this purpose. Every week or so, I check the flats to see if any sprouts appear and return those to the warm box. Other species won't germinate while cold so I return those flats to the warm box after a pre-determined length of time, whereupon sprouts appear a week or two later. Some species require "warm" stratification, which is being held at 70 degrees for a certain length of time, then subjected to cold. Yet other species (fewer yet, thankfully) require more than one cycle of temperature shifts, often referred to as "oscillating temperatures" or" outdoor treatment."

Technique 2: Scarification



Seed sprouts only after the seed coat is nicked so that water can enter

the seed. Germination then follows either

with no further treatment (usually) or requires stratification (rarely). Sandpaper (fine grit) is suitable for most cases by dragging the seed along until you see a color change (endosperm exposed.) Some seeds are encased in a water-resistant membrane. Merely a variant of scarification, these membranes can be easily removed by rubbing between the bare or leather-clad palms, revealing the often different-looking seed inside. *Castilleja, Chionophila* and some *Penstemon* species are good examples of this type. Note these are all genera in the *Scrophulariaceae* family.

Table of Genera by Category

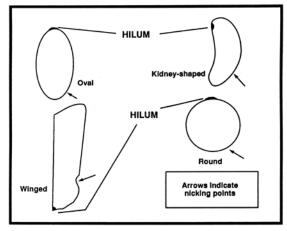
I list here the family, genera or species in the ALPLAINS catalog by which germination category they fall into:

- 1. No pre-treatment: Agastache, Agavaceae, Aloinopsis, Antimima, Arbutus, Artemisia, Aster, Bouvardia, Buddleia, Calandrinia, Calylophus, Calyptridium, Centaurium, Cerastium, Chamaebatiaria, Chamaechaenactis, Chilopsis, Clementsia, Crassula, Delosperma, Dianthus, Dracocephalum, Dudleya, Enceliopsis, Ephedra, Erigeron, Haplopappus, Heuchera, Houstonia, Hymenoxys, Lepidium, Leucophyllum, Ligularia, Mimulus, Monarda, Monardella, Oenothera, Origanum, Penstemon hallii, P. harbourii, P. clutei, Petrophyton, Physaria, Potentilla, Ramonda, Salvia, Sedum, Silene, Talinum, Townsendia, Yucca, Zauschneria, Zinnia.
- 2. *Stratification*: Abronia, Acaena, Adenophora, Aethionema, Akebia, Allium, Amsonia, Androsace, Anemone, Anemonopsis, Angelica, Antennaria, Apiaceae, Aquilegia, Arabis, Arctomecon, Arenaria, Argemone, Arisaema, Asarum, Asclepias, Asyneuma, Balsamorhiza, Berberis, Calochortus, Caltha, Camassia,

Campanula, Cardiocrinum, most Cactaceae, Castilleja, Cercocarpus, Chaenactis, Chimaphila, Chionophila, Claytonia, Clematis, Collomia. Corydalis, Cryptantha, Cusickiella, Cymopterus, Delphinium, Dicentra, Dodecatheon, Douglasia, Draba, Echinacea, Eriogonum, Eritrichium, Erysimum, Erythronium, Fraxinus, Fritillaria, Gentiana, Gilia, Hulsea, Ipomopsis, Iridaceae, Kelseva, Leptodactylon, Lesquerella, Lewisia, Lilium, Linum, Mertensia, Paeonia, Parrya, most Penstemon spp., Phlox, Polemonium, Primula, Pulsatilla, Salvia, Saponaria, Saxifraga, Scutellaria, Stachys, Synthyris, Trollius, Veronica, Viola.

3. *Scarification*: Amorpha, Arctostaphylos*, Astragalus, Baptisia, Caesalpinia, Callirhoe*, Caragana, Cassia, Ceanothus*, Cercis*, Dalea, Iliamna, Ipomoea, Lathyrus, Leucocrinum*, Lupinus, Sphaeralcea, Sophora, Oxytropis, Pelargonium, Trifolium.

Note: an asterisk () following indicates the need for stratification as well.*



In examining this matrix, some patterns begin to emerge: seeds that require scarification belong to hard-shelled families such as *Convolvulaceae*, *Fabaceae*, *Malvaceae* and *Ericaceae*. These seeds are often as hard as small pea-gravel. Unfortunately, habitat is not an accurate predictor of seed germination type. The seeds of many alpine species come up easily with no pre-treatment whereas many lowland species still need stratification.

However, seeds of warm deserts generally sprout with no treatment, except perhaps scarification.

Other Techniques

If you are just beginning your adventure into the wonderful world of seed germination, I suggest you start with seed requiring no pretreatment to gain confidence and to increase your skill in growing on the resulting seedlings into mature plants. Naturally, as your interest grows, you may want to learn about other techniques in seed germination to handle more challenging cases. Probably the most useful of the minor techniques is:

Gibberelic Acid (GA3): Much has been written about this growth hormone. Most seed does NOT require treatment with this chemical and only results in dead seed or weak, spindly seedlings that quickly rot. The seed of some cacti, rosulate and sagebrush violets, *Glaucidium*, *Aquilegia jonesii* and other calciphiles do indeed benefit from GA3 treatment, but if you working on these cases, then you have reached a level of sophistication which should yield success.

Since I have often been asked how to use GA3, I will outline my procedure here. First, the seeds to be treated must absorb a solution of GA3. I never pre-mix GA3 with water because it does not keep long. Solid (powdered) GA3 keeps indefinitely and I mix it with water on the spot when needed. I use small, glass, 2-cc (cubic centimeter) vials (about an inch tall) with tight-fitting lids. I get these by the hundred, including the powdered GA3, from my local chemical supply house. I made a rack to hold the vials from a piece of particle board shelf by drilling a matrix of 1/2"-deep holes on 2inch centers. Masking tape between the rows allows for easy labeling. Every vial gets its

own batch of seed to be treated and I then add an amount of GA3 that fits on the tip of a small chemist's spatula (equal to about several grains of salt). Using a dropper, I add warm water to about half-fill the vials and let them all stand overnight in a warm place. By the next day, the water will have absorbed the GA3 and the seeds will have absorbed the solution. It can stand for another day but after that, rot usually begins. Each vial then needs to be flushed out into a beaker and sown. Swirling the beaker while dumping the seed/solution mix onto the sowing medium takes some practice to equally distribute the seeds but it is the fastest way to complete the chore. The seeds can be drained and dried briefly but must be sown and watered immediately. The flats are further treatment then readv for (stratification.) Using GA3, close to 100% germination results on Viola beckwithii, V. trinervata and other sagebrush violets.

Dry storage of some seed types (especially Cacti) actually increases germination yield and decreases the necessity for GA3 because germination inhibitors are destroyed as the seed ages. For instance, after 2 years of dry storage, *Maihuenia poepiggii* seed sprouts in a few days without the need for GA3.

Alan Bradshaw

Editors Notes:

We are closing in on winter, and that means a vacation of sorts from BNARGS meetings, and to a large degree, outdoor gardening. Our last meeting of 2008 is a Potluck, and we are depending on YOU to bring the variety of food items necessary to feed 40-60 people, so please plan on coming with something tasty. Check with me to see what we will need, whether it is dessert, an entrée or something to drink. 2009 will be kicking off in March, weather permitting, and we have an outstanding program schedule. The 2009 Eastern Winter Study Weekend is being held in Reston, VA in late January. Here is the link: http://www.pvcnargs.org/EWSW09.htm

The Western Study Weekend will incorporate the Annual NARGS National Meeting, given the failure of any Chapter to organize and run our 75th Anniversary event. The Columbia-Willamette Chapter is running this dual event, and it will take place in Portland, OR on March 15-18. They have no website yet, but keep checking. As always, our Chapter will provide one partial scholarship for a 1st time attendee, so please contact our Chairperson, Cliff Desch, for details

Finally, and this really is FINALLY, this issue will be the last for any of you who have not paid your 2008 dues. Pam Johnson is our treasurer, and I hope that you get your membership dues to her soon, so you won't miss an issue.

On a personal note, I want to thank the several members of our Chapter who have been essential to our monthly effort to keep the pages filled with interesting and relevant writings and pictures. I won't mention names, but without YOU this effort would be hopeless, and we would all be diminished in some modest but important way. And of course I welcome anyone from our chapter, or elsewhere, who is willing to contribute. You don't have to be a great writer, or a great gardener, to contribute. This is not a professional journal, and we relish the opportunity to find out what makes all of our members tick, regardless of erudition and botanical knowledge.

I hope to see many of you at the luncheon.

Positions of Responsibility

Chairperson – Cliff Desch Vice-Chairperson – Robin Magowan Secretary – Carol Hanby Treasurer – Pamela Johnson Archivist – James Fichter Audio Visual Chairperson - Joe Berman Greeter – Open Independent Director – Peter F. George Newsletter Editor – Peter F. George Meeting Recorder – Joyce Hemingson Plant Sale Chairperson – Bob Siegel Program Chairperson – Robin Magowan Proofreader – Cliff Desch Refreshments Chairperson – Joyce Hemingson Speaker Housing – Anne Spiegel

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Membership is open to all members of NARGS Dues \$10.00 single, \$12.50 Family Payable to the Treasurer Pamela Johnson PO Box 203, 140 Main Road Monterey, MA 01245

Deadline for Next Newsletter is November 20, 2008

Please contact editor before reprinting articles

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